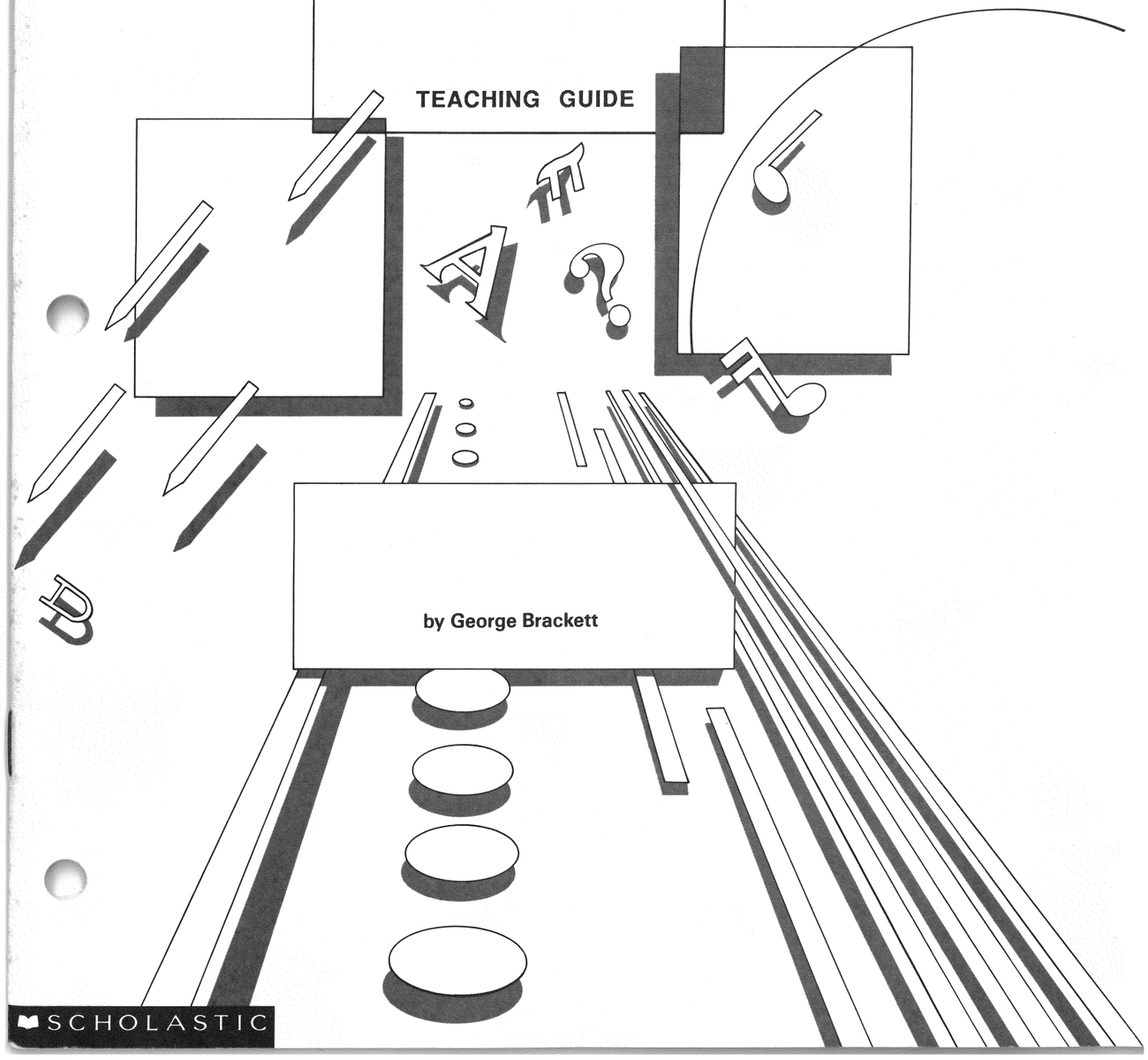
Y. Clark

Scholastic

HYPERSCREEN™

TEACHING GUIDE



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SCHOLASTIC

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Why Use *Scholastic HyperScreen*?

We are constantly bombarded by information—TV pictures, news headlines, catchy jingles, posters, and sirens. Students interact with media from music videos to video games to magazines, sometimes simultaneously—information in a constant and relentless stream. They need ways to organize and retrieve information effectively. *HyperScreen* is an information-organizing tool accessible to students. It promotes active use of information. Using *HyperScreen*, students relate text, images, and sounds in original ways.

Teachers can use *HyperScreen* to create multimedia interactive lessons and presentations organized in stacks for students to browse through, or guide students to construct their own stacks. Teachers of young children can make stacks that present or reinforce curriculum in innovative ways. Teachers of older students can make browsable stacks, and can lead their students to make their own as well. When designing stacks, students decide what information to incorporate and how the information will be retrieved. This makes *HyperScreen* a powerful teaching tool.

Critical Thinking

In the process of planning and creating a stack students develop these skills:

- Problem solving.
- Setting goals.
- Analyzing ideas.
- Synthesizing ideas.
- Thinking in a non-linear way.
- Organizing information.
- Thinking visually.
- Locating, gathering, and evaluating information.
- Making decisions.
- Thinking metaphorically.
- Developing a point of view.
- Designing.
- Testing.
- Revising.

In the process of planning and creating stacks together, students learn to be productive members of a group.

How to Start

This Teaching Guide assumes you have worked with the program and have completed the Tutorial on page 104 of the User's Guide or made a stack or two of your own. If not, turn to the Tutorial, or to the Quick Guide on page 19 of the User's Guide. Once you have become familiar with *HyperScreen*, decide how you want your students to use this program. Will they be browsers, designers, or both?

If you want your students to browse stacks only, then your preparation will be limited to stack design and a brief explanation of how to browse. However, if you want the students to design stacks, then you will need to introduce the individual features of *HyperScreen*.

You can teach *HyperScreen* techniques and assign starter projects without having explored every aspect of the program. Once you teach students the basics, they will quickly take off.

As you begin designing *HyperScreen* stacks, suspend your curriculum needs to allow yourself time to get used to the program. Make a *HyperScreen* Quick Start activity. (See pages 8-11 of this Guide.) As you make the Quick Start stacks, you will start to see how *HyperScreen* works and relates to your curriculum. Also, see *HyperScreen* Curriculum Activities beginning on page 12 and *HyperScreen* Ideas Across the Curriculum beginning on page 25 for ways to use *HyperScreen*.

Classroom Management

Grouping Students to Design Stacks

When organizing your students for a *HyperScreen* project, decide whether to have individual or group projects. You may choose to have students work as a committee with each person taking on a specified job such as structural designer, artist, researcher, writer, or reviewer. Students will go through the following cycle of tasks: planning, creating, testing, and revising.

During the planning stage, encourage your students to brainstorm and outline their project. Ask them to explore these questions: What is the object of your stack? Who is your audience? What information is going into your stack? Do you need to do research? How are you going to organize it? What graphics, text, and sound do you need? How will your audience retrieve the information?

If students have many sessions in which to complete their work, they can create complex stacks. If their time is limited, they may have to streamline their stacks. If students want to put a lot of information into a *HyperScreen* creation, they can divide the work into different categories and link stacks together.

As students create a stack they will move between designing, revising, and testing. Have students share a stack-in-progress to see whether it works as they planned.

Classroom Computer Arrangement

With One Computer

One Stack

The whole class works together to design a stack. Divide the work involved among pairs of students. Then students can take turns working at the computer.

Multiple Stacks

Students are asked to work individually, in pairs, or in small groups to complete their stacks.

With Multiple Computers

Even though you may have many computers available, you may choose to have students work in groups on some tasks. This program lends itself to committee work.

NOTE: When creating browsable stacks for your students, keep in mind that if you have one computer you will want to make short stacks for them, while if you have multiple computers your stacks can be longer.

Software Needs

When using *HyperScreen*, you will need the *HyperScreen* disk package which includes Graphic Backgrounds, Clip Art, Fonts, Borders, and Sound as well as blank disks. Optional disks include *Slide Shop™, Super Story Tree™, Scholastic Graphic and Sound Booster Packs™*, compatible word processors and graphics programs, and ProDOS disks on which to save original artwork.

See page 16 in the Getting Started section of the User's Guide for more information about disk management.

Below is a useful summary of information and tips on using the program. You may want to copy or share this information with your students.

HyperScreen Hints

Stack Design

Think through a stack design before creating a stack using *HyperScreen*. Make notes using a chart or map of the stack. When designing a screen, think about where you want to go from that screen and design buttons to reach that destination. To avoid dead ends and endless loops, careful planning of overall stack design is recommended. See the Stack Design Charts on page 105 of the Tutorial in the User's Guide and on pages 29-38 of this guide for ideas.

Screen Design Questions

When creating a stack, keep your audience in mind. For whom is the stack designed? How much information can be put on a screen without overwhelming the user? Should the buttons to be visible or invisible to the user?

Button Visibility
When planning buttons on a screen, consider whether to mark them clearly or hide them. Factors to consider are the age of the user and the purpose of the stack. For example, if you want the user to move easily from one screen to the next, it makes sense to have a clearly marked Link to Screen button. However, if the design is a haunted house, for instance, and the user is meant to stumble on a secret passage, then the button should be hidden.

Naming
There is a lot of information to name in *HyperScreen*—stacks, screens, and original clip art. Naming is an important organizational skill. Choose names that are functional. When names are clear, it's easier to maneuver back and forth between screens when designing a stack.

Disk Space
Since a 5.25-inch disk fills up quickly, it is advisable to put only a few stacks on a disk. It's possible to fit more stacks on a 3.5-inch disk. Have extra stack disks available, especially when first using *HyperScreen*.

Disk Full Message
At times you will be working on a screen and find you are unable to save it because the disk is full. To get around this keep a number of ProDOS disks handy. Insert a ProDOS disk and choose Export Screen Image from the FILE MENU on the menu bar to save a screen and later import it as a graphic background. Any buttons that have been created will not be saved on the exported image, so a screen should also be saved with the Save Screen option if you wish to save buttons.

Superscript or Subscript
If you are using math or science symbols, choose a Graphic screen and select Type. Pressing Esc moves the cursor to the desired location for a superscript or subscript.

HyperScreen Quick Starts
As a way to introduce yourself and your students to *HyperScreen*, try one of these quick ideas. Make a stack disk with these stacks on it and make copies so students can browse through these activities at several computers simultaneously. If you need more instructions on using any of *HyperScreen*'s features as you create your stacks, consult the appropriate section of the Reference Guide in the User's Guide.

Ms. Hyper Heart
This stack, will include an advice-column letter with a problem. Three possible answers to the problem will appear in pop-up text buttons at the bottom of the screen.

In browsing through this stack, students will:

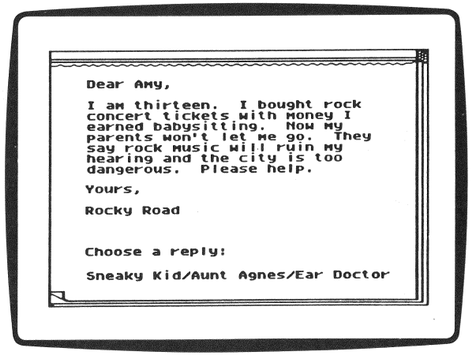
- Use Pop-up Text buttons.

Elements Used to Create a Single-screen Stack
- A typed letter asking for advice.
- Three Pop-up Text buttons containing possible answers to the letter.

Find an advice-column letter with a problem that might interest your students. If you like, write your own letter. Choose three people who will answer this letter. Type their names on the screen.

Use Set Buttons and Set Button Info to make each of the three names into a Pop-up Text button. Type the advice in the appropriate pop-up text windows. Be sure the name of the advice giver appears in each window.

Below is an example of text you might use for this screen.


Dear Amy,
I am thirteen. I bought rock concert tickets with money I earned babysitting. Now my parents won't let me go. They say rock music will ruin my hearing and the city is too dangerous. Please help.
Yours,
Rocky Road
Choose a reply:
Sneaky Kid/Aunt Agnes/Ear Doctor

The names Sneaky Kid, Aunt Agnes, and Ear Doctor are Pop-up Text buttons. Below is the text that will appear when each is clicked.

Sneaky Kid—Hey Rocky, chill out. Tell them you are baby-sitting and go anyway. This is a free country.

Aunt Agnes—Rocky dear, you can stay with me in the city that night. Cousin Frank could take you there and pick you up.

Ear Doctor—Well, Rocky, unless you want to be stone deaf, you'd better watch those decibels. Get earplugs and wear them!

You might want to initiate a class discussion about various other solutions to the problem.

News Flash
This stack will include a Home Screen with catchy news titles linked to screens with news briefs.

In browsing through this stack, students will:

- Use Link to Screen buttons.

Think of catchy news headlines for books or ideas in your curriculum. Below are examples of headlines you might use.

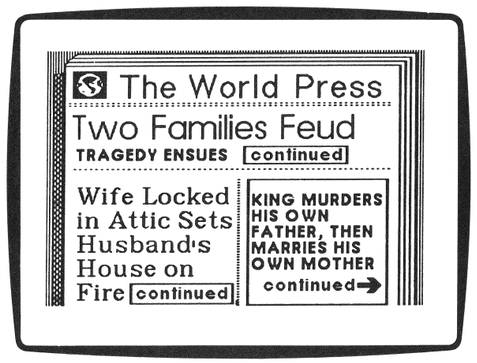
Families Feud, Tragedy Ensues (*Romeo and Juliet*)
King Kills Dad, Marries Mom (*Oedipus Rex*)
Designer Genes (DNA)
Bus Seat Leads to Boycott (Rosa Parks)

Elements Used to Create a Home Screen

- Typed news headlines.
- Link to Screen buttons.

Type in your headlines. After each headline type **Continued**.

Use Set Buttons to make each "Continued" a Link to Screen button. Use Set Button Info to link each "Continued" button to a new screen. You could name the screens Brief1, Brief2, etc.


The World Press
Two Families Feud
TRAGEDY ENSUES [continued]
Wife Locked in Attic Sets Husband's House on Fire [continued]
KING MURDERS HIS OWN FATHER, THEN MARRIES HIS OWN MOTHER
continued

Elements Used to Create News Brief Screens

- Typed in news briefs.
- Link to Screen buttons.

Type in a news brief to accompany each headline. Type **Home** at the bottom of each screen. Use Set Buttons and Set Button Info to make "Home" a Link to Screen button that links each news brief screen to the Home Screen.

Password to Treasure

This stack consists of a Home Screen with pop-up text riddles. The answer to each riddle is a clue to the password.

In browsing through this stack, students will:

- Find hidden Pop-up Text buttons.
- Use information in the Pop-up Text buttons to decipher a secret password.
- Type a password at a Text Entry prompt and go to an appropriate screen.

Elements Used to Create a Home Screen

- A graphic background, clip art, and original drawing.
- Hidden Pop-up Text buttons with riddles typed into the text windows.
- A written prompt with a Text Entry button set below.

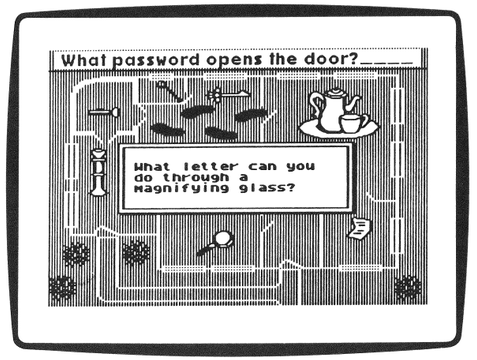
Think of a password. Make up a short riddle for each of the letters in the word.

Design the screen using a graphic background and clip art. Use Set Buttons to make as many Pop-up Text buttons as there are letters in the password. Use Set Button Info for each button to type in a riddle with an answer that is one letter of the password.

Type in a prompt on the screen asking for the password, for example, **What's the word?** Create a Text Entry button near the typed prompt.

Use Set Button Info to enter the password as the exact match. The correct password should take the student to a new screen (Yes Match screen) named Payoff. An incorrect answer should take the student to a new screen (No Match screen) called Noway.

Use Open Screen to work on the two new screens, Payoff and Noway, that are linked to the Text Entry button. Each of these screens should have a Link to Screen button connecting it to the Home Screen. Payoff will be a reward screen containing text and sound effects for a successful solution to the puzzle. Noway will tell users that the puzzle has not been solved and they should try again. You could add a hint to the solution on Noway if you like. Link these screens to the Home Screen.



HyperScreen Curriculum Activities

This section contains stack design activities for specific subject areas. Some lessons are designed so you can choose to have students create a one-screen stack or expand the idea into a larger stack with linked screens. Try one or more of these lesson formats, using material covered in your curriculum.

Book Review (a Single-screen Stack)

Curriculum Area English
Grade Level 6th and Up

In designing this stack, students will learn:

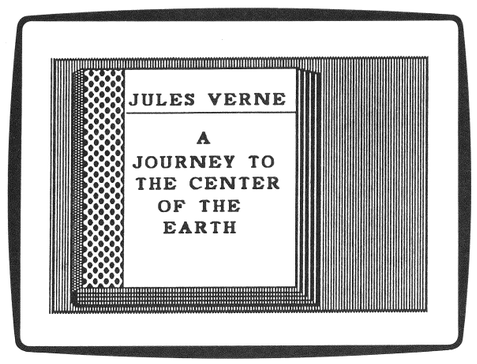
- To introduce books by a variety of authors.
- To identify the main idea of a story.

Buttons Used
- Pop-up Text button.

Materials
- Single-screen Stack Design Chart on page 30 of this Guide.

Introducing the Activity
Have students create *HyperScreen* stacks to share books they've read. Each student should think about the main idea of the book he or she has just read and write it down.

Screen Design Instructions for Students
Choose a Graphic screen and opening transition, and decide how to arrange information about the book on the screen. A simple way might be to type the title of the book and put a frame around it. This could be made into a Pop-up Text button. For this stack, the graphic backgrounds from the *HyperScreen* library might also be helpful.



Type the main idea of the book in the Pop-up Text box. Summarize the idea concisely. Keep in mind that the window is limited to 109 characters, including spaces.

Extending the Activity
After book review screens have been created, share them by having the whole class view the stack or stacks on a large monitor, or have students take turns viewing the stacks.

The Book Review Ad (Hub Screen with Linked Screens)

Curriculum Area English
Grade Level 6th and Up

In designing this stack students will learn:

- To develop a book review as an ad that includes a plot summary, description of the main character, setting, and an opinion.

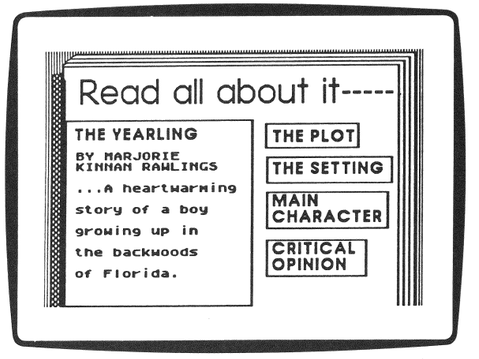
Buttons Used
- Link to Screen button.

Materials
- Books reviewed.
- Hub Screen with Linked Screens Design Chart on page 35 of this guide.

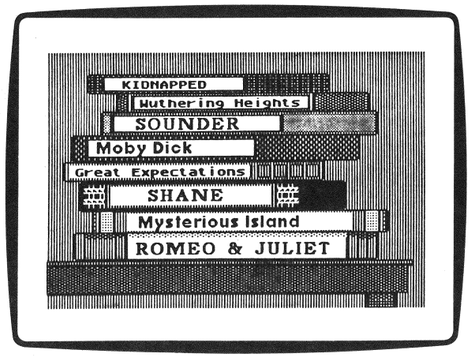
Introducing the Activity
Students should discuss which books to review and which format to use for their stack.

Screen Design Instructions for Students
The following are two possible ways to create a book ad.

1. Create a Home Screen (either a Text or Graphic screen) that is an ad for the book with buttons linking it to other screens. Each connected screen would be a Text screen describing a different aspect of the book. Below is a sample of how your Home Screen might look.



2. Create a Home Screen advertising different books. Each book would be a Link to Screen button connected to a Graphic or Text screen with details about the book.



Creating a Food Web (Single-screen Stack)

Curriculum Area Science
Grade Level 6th and Up

In designing this stack, students will learn:
- The elements of a food web.
- How to construct a model of a food web.

Buttons Used
- Pop-up button.
- Sound/FX button.

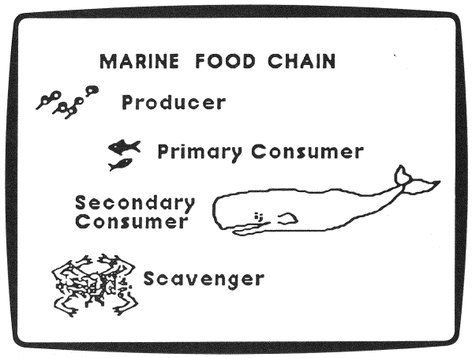
Materials
- Reference materials on eating habits of various organisms in a food web.
- Single-screen Stack Design Chart on page 30.

Introducing the Activity
Discuss the elements of a food web. Have students research the eating habits of the organisms in a food web.

Screen Design Instructions for Students
On a Graphic screen show the following elements in a food web:

- Producer.
- Primary Consumer.

- Secondary Consumer.
- Scavenger.



Create a Pop-up Text button with text describing each element. If desired, add a Sound/FX button that operates when the screen is opened (a Do On Opening button).

Food Web, Extended (Chain of Screens)

Curriculum Area Science
Grade Level 5th and Up

In designing this stack students will learn:

- To elaborate a model of a food web.
- Graphic mapping of a food web.

Buttons Used
- Pop-up button.
- Sound/FX button.
- Link to Screen button.

Materials
- Reference materials on eating habits of animals
- Chain of Screens Design Chart on page 31.

Introducing the Activity
Discuss extending the single-screen food web stack by linking it to new screens for each element.

Screen Design Instructions for Students
On the Home Screen described in the Creating a Food Web Stack, add a Link to Screen button. Name the new screen Producer and illustrate the screen. Add a Link to Screen button and name the next new screen Primary Consumer. Illustrate the Primary

Consumer screen and add a Link to Screen button, naming the next new screen Secondary Consumer. Illustrate the Secondary Consumer screen and add a Link to Screen button calling the next new screen Scavenger. Finally, illustrate the Scavenger screen and add a Link to Screen button taking the user to the Home Screen.

To keep successive screens consistent you can import the graphic images directly by selecting Graphic Background from the TOOLS MENU and selecting the appropriate screen from the Stack disk, or you can export the graphic screens as outlined below:

1. Create and save the Producer screen as an exported graphic called Producer (select Export Graphic Screen from the FILE MENU) on a ProDOS disk. After adding buttons, save the screen on your stack disk. Then open the Primary Consumer screen.
2. Select Graphic Background from the TOOLS MENU, import the Producer graphic, draw the primary consumers on it, and export this screen as a graphic called Primary Consumers. Add buttons and save the screen on your stack disk. Then open the Secondary Consumer screen.
3. Select Graphic Background, import the Primary Consumers screen, draw the Secondary consumers on it, and export this graphic screen called Secondary Consumers. After adding buttons to the screen and saving it, open the Scavenger screen.
4. Select Graphic Background once again, import the Secondary Consumer screen, and draw the scavengers on it. Because this is the last screen in the chain, don't export it, but be sure to add a Link to Screen button that will link the user to the Home Screen.

Vocabulary Builder (Single-screen Stack)

Curriculum Area All Subject Areas
Grade Level 5th and Up

In designing this stack, students will learn:
- New vocabulary words and definitions.

Buttons Used
- Pop-up button.
- Sound/FX button.

Materials
- Vocabulary words and definitions to be learned.
- Single-screen Stack Design Chart on page 30.

Introducing the Activity
Have students create a *HyperScreen* stack to help them learn their new vocabulary words.

Screen Design Instructions for Students
On the Home Screen, type the vocabulary words. Under each word, write a sentence using the word. Use Set Buttons to make each word a Pop-up Text button and use Set Button Info to type in a definition of the word to appear in the Pop-up Text window.

Vocabulary Quiz (Branching Chain of Screens)

Curriculum Area All Subject Areas
Grade level 6th and Up

In designing this stack, students will learn:
- How to design and prepare a vocabulary quiz.

Buttons used
- Pop-up Text button.
- Sound/FX button.
- Link to Screen button.
- Text Entry button.

Materials
- A completed Home Screen vocabulary stack.
- Branching Chain of Screens Design Chart on page 33.

Introducing the Activity
Building on the idea of a single screen from which students can learn definitions of vocabulary words, have students link a quiz screen to the vocabulary screen. Students might learn the definitions of words or master simple facts from the Home Screen, then go to the quiz screen to test themselves.

Screen Design Instructions for Students
Add a quiz Link to Screen button on the Home Screen. Name the new screen Quiz and make it a Text screen.

Write a definition on the Quiz screen for each vocabulary word that appears on the Home Screen, using Set Buttons to make each definition a Text Entry button. Choose Set Button Info. Next to "Match: " type the vocabulary word. Next to "If Yes:" type **Congrats**. Next to "If No:" type **Home**. Set an Entry Blank below each vocabulary definition.

When browsing the Quiz screen, the user clicks on a definition, a prompt appears, and the user types in a vocabulary word. If the user is right, a congratulatory screen will appear. If the user is wrong, he or she will be linked to the Home Screen to study the word and definition again.

Create a reward screen (a Text screen) for correct answers. Add a Sound/FX button with music or speech. Link to Screen buttons could return the user either to the Quiz or to the Home Screen.

Stepping Through Time (Single-screen Stack)

Curriculum Area All Subject Areas
Grade Level 5th-12th

In designing this stack, students will learn:
- To research a 10 year period of history.
- To select main events of particular interest to them.

Buttons Used
- Sound/FX button.
- Pop-up Text buttons.
- Multi-button.

Materials
- Encyclopedia, *Guinness Book of World Records*, newspapers, magazines, and other periodicals.
- Single-screen Stack Design Chart on page 30.

Introducing the Activity
Have the students design an interactive timeline of major historical events that occurred during the first 10 years of their own lives. The students should collect these historical items from a wide variety of sources.

Screen Design Instructions for Students
Use the graphic tools to design a 10-year timeline on the Home Screen. The years should be clearly marked. Use Set Buttons to make each year a Pop-up Text button. Use Set Button Info to type in an historical item for that year. Be sure to include the date in the text window as well.

Now create a Sound/FX button. Mark the button area with graphics or words. Then go to Set Button Info, choose a Sound/FX button type, and select a piece of music, speech, or sound. This should be a Do On Opening button.

Finally, design a Multi-button enabling users to read the timeline facts by flipping through the Pop-up Text buttons. Listing the Pop-up Text buttons in the Multi-button in a specific order allows the user to browse through facts in that order. Try a variety of Multi-button list arrangements.

Stepping Through Time, Extended (Hub Screen with Linked Screens)

Curriculum Area All Subject Areas
Grade Level 5th - 12th

In designing this stack, students will learn:
- To elaborate details through text and graphics.

Buttons used
- Sound/FX button.
- Pop-up Text button.
- Link to Screen button.
- Text Entry button.
- Multi-button.

Materials
- A timeline (single-screen design described above).
- Historical resources
- Hub Screen with Linked Screens Design Chart on page 35.

Introducing the Activity
The students will add a chain of screens to their timeline. Have them decide which incident or person on their timeline interests them most and outline a series of screens for that topic.

Have them research the topic and plan their chain of screens. Since they will be linking Text and Graphic screens, they should designate each screen in their outline as one or the other. A story about an incident or person fits easily into this chain format, but they might use other constructs, such as a series of quotes from a person, the background of an event, or different views of the same occurrence.

Screen Design Instructions for Students
Use the graphic tools to design a Link to Screen button on the timeline Home Screen from the previous single-screen stack. Link this to a new screen. Develop a strategy for naming screens. For instance, in choosing to write about the Space Shuttle, a simple Space1 would probably work better than Spac.Shut. as a title.

Next, set up a series of linked screens. Choose Open Screen from the FILE MENU and open the newly named first screen. Fill the first screen with information, and then link it to the next screen with a Link to Screen button. Keep screens simple at first to concentrate on the flow of screens. Once the travel structure is in place, go back to each screen and fill in more details.

Once the basic screen links are in place, add Pop-up Text, Sound/FX, Text Entry, and Multi-buttons. The following are some suggestions for how to use buttons in this chained series of screens.

Sound/FX For introductory music, create a Do On Opening button. To create theme music, make the button clickable, and not a Do On Opening button.

Text Entry Write review questions about the timeline.

Pop-up Text Make key words on each screen clickable buttons that present facts in pop-up text windows.

Multi-button Group all the key word Pop-up Text buttons together.

On Exhibit (Linked Hub Screens)

Curriculum Area Social Studies
Grade Level 6th and Up

In designing this stack, students will learn:
- To research and organize information about artifacts from a particular historical period.

Buttons Used
- Pop-up button.
- Sound/FX button.
- Link to Screen button.
- Multi-button.
- Link to Stack button.

Materials
- Reference materials on artifacts from a specific time period.
- Linked Hub Screens Design Chart on page 36.

Introducing the Activity
Discuss the fact that historians often study a large number of artifacts when surveying a particular historical period. Students will create a *HyperScreen* museum exhibit to organize information about selected artifacts.

Screen Design Instructions for Students
The overall design of this stack is a series of hub screens. From each hub, create linked screens that expand on it. Think of each hub as a room in a museum exhibit hall. Place two or three artifacts in each room and link each artifact to a screen describing it. On each artifact description screen create a Link to Screen button connecting the user to the hub screen. Another Link to Screen button should link each hub screen to the next hub screen or room in the museum.

Home Screen:

Use graphic tools to create a museum front with banners containing the name of the museum and the exhibit.

The front door of the museum might be a Link to Screen button that connects to the first exhibit room. Name the new screen Room 1.

Room 1 Screen:

Make Room 1 a Graphic screen. Place two or three artifacts, such as a mummy case, a cartouche, and a canopic jar in the room, using clip art or graphic tools to draw the artifacts. Each artifact should be a Link to Screen button. On the linked screens, type in information about each artifact. Also create a Link to Screen button connecting to Room 2.

Design a mummy screen as a Text screen describing mummy cases. This screen might have a Sound/FX button that would play upon opening. Add a Link to Screen button connecting the user to Room 1. Design cartouche and canopic jar screens in the same way as the mummy screen.

Room 2 Screen:

Choose a Graphic screen for Room 2 and select a few more artifacts, for example, statues of the gods Osiris, Isis, and Horus. On this screen create Pop-up Text buttons that provide descriptions of each artifact. A Multi-button might also allow the user to click through these Pop-up Text buttons. Finally, create a Link to Screen button connecting to the last room, Room 3.

Room 3 Screen:

Create a Text screen containing a brief quiz on the artifacts, with a question for each artifact. Use a Text Entry button for each question to create a blank so that users can write their answers. For each question, create a congratulatory screen that appears if the answer is correct. If the answer is wrong, the user should be linked to a screen containing more information for help in answering that question. Add Link to Screen buttons that connect to Room 3 or Home.

Math Flash (Single-screen Stack)

Curriculum Area Math
Grade Levels 6th-12th

In designing this stack, students will learn:
- To define specific mathematical terms.

Buttons Used
- Sound/FX button.
- Pop-up Text button.
- Multi-button.

Materials
- Math texts.
- Single-screen Stack Design Chart on page 30.

Introducing the Activity
In this activity the students will prepare math fact screens. First have them decide which math facts or definitions they would like to study.

The students can choose math terms such as *pi, hypotenuse, imaginary number,* or *integer*. Each of these terms can be made into a Pop-up Text button, with the definition as the pop-up text. Students might also write the definition of each term on the screen and have the terms pop up.

If the students prefer to present math problems or algebraic formulae, then a whole or partial solution to each problem could be presented in a pop-up text window.

Screen Design Instructions for Students

Create a math facts Home Screen using a Text or a Graphic screen. Choose up to 10 math facts or math ideas to present on the screen. Position these facts so a button area can be designated on or near each fact. Create a Pop-up Text button for each fact. Design a few Multi-button areas on the screen. First decide how the facts in the Pop-up Text buttons should be listed in the Multi-button. The facts could be listed in order from the easiest to the most difficult, or staggered in difficulty.

Sound effects could be used effectively on this screen. Create a Sound/FX button, then use a Multi-button to intersperse Pop-up Text fact buttons with the Sound/FX button so the user hears a sound interlude between facts.

The Scene of the Crime (Single-screen Stack)

Curriculum Area All Subjects
Grade Level 5th and up

NOTE: While this stack involves a mystery, it can be adapted to help students learn to gather evidence leading to a solution in any subject area, and this can teach them to develop problem-solving skills.

In designing this stack, students will learn:
- To sort through information.
- To select clues leading to a solution.

Buttons Used

- Sound/FX button.
- Pop-up Text button.
- Multi-button.

Materials

- Mystery books.
- Mystery movies on videotape.
- Single-screen Stack Design Chart on page 30.

Introducing the Activity

Discuss mystery films or television shows students have seen. Have them outline a mystery plot. They should select five clues from one scene of a mystery. They may then design a Home Screen with these clues hidden. Information about the clues will be retrieved through Pop-up Text buttons and Sound/FX buttons. Have students think about how mystery writers use sounds as clues such as a hollow tap, the creak of a board, a scream, or a gunshot.

Screen Design Instructions for Students

Draw a scene-of-the-crime Home Screen on a Graphic screen or use a graphic background. Use clip art or original art to plant the clues the user will uncover.

Decide where the clues should be arranged and then use Set Buttons to position buttons on the screen. The clues could be Sound/FX as well as Pop-up Text buttons. Hide buttons by blending them into the scene so that the sleuth must poke around to find the information. As in any good mystery, add misleading clues, thus challenging the logical powers of the observer.

After setting buttons, use Set Button Info to type in pertinent facts about each clue. When creating a Pop-up Text button as a clue, label the information so that the sleuth knows to which button the text window refers. This is especially important when the user flips through a series of Pop-up Text clues using a Multi-button.

Statistically Speaking (Linked Web of Screens)

Curriculum Areas Math, Social Studies
Grade Level 5th-12th

In designing this stack, students will learn:
- To plan and conduct a survey.
- To tally up survey results.
- To analyze results and display them as charts or graphs.

Buttons used

- Link to Screen button.
- Sound/FX button.
- Pop-up button.

Materials

- Examples of charts, graphs, and pictograms.
- Examples of surveys and opinion polls.
- Linked Web of Screens Design Chart on page 38.

Introducing the Activity

Students will write up a questionnaire, administer it, and tally up the results. Have students decide on four questions to ask a group of people. Students will then report the results of their survey interactively. The following are some ideas for questions:

Current-events opinion poll—How do you rate the president's performance in these areas: the economy, social services, foreign policy, education?

A past-events opinion poll—What do you think were the four major events in the 19th century?

A cultural opinion poll—What are your five favorite movies, books, works of art, and songs

Screen Design Instructions for Students

The Home Screen is a one of four similar screens containing survey results. Draw one of the survey result graphs on the Home Screen and add three Link to Screen buttons on each screen, connecting them to each of the other screens.

Draw in the results of each of the three remaining questions on Graphic screens and use three Link to Screen buttons connecting the screens. For this activity, the graph paper, notecard, or clipboard graphic backgrounds from the *HyperScreen* library may be useful.

Extending the Activity

Have students use Pop-up Text buttons within each survey screen to give written information about the graphs.

Have students add a Link to Screen button to each of the survey screens connecting it to a Text screen which explains background, administration, and results of the survey.

Should We Save the Rain Forests? (Hub Screen with Linked Screens)

Curriculum Area Science/Social Studies
Grade Level 6th and Up

In designing this stack, students will learn:

- Information about rain forests.
- Different points of view surrounding the survival of the rain forest.

Buttons used

- Link to screen.

Materials

- Magazines and Newspapers with articles about the rain forests.
- Hub Screen with Linked Screens Design Chart on page 35.

Introducing the Activity

Have students discuss the rain forests by collecting articles from magazines and newspapers and analyzing the point of view of each article.

Screen Design Instructions for Students

Design a title screen presenting this problem: A large cooperative cattle farmer funded by a major U.S. fast-food chain wants to clear 20,000 acres of rain forest in Belize. However, there is opposition from various environmental groups around the world. One way of handling this subject might be to create a screen representing a protest rally. Half the screen might be devoted to those who are in favor of cutting down the forests. The other half would show those against clearing the forests. Link to Screen buttons could connect screens on which each group of protesters "states" their viewpoints.

On each viewpoint screen, Link to Screen buttons could connect to the opposing viewpoint screen as well as the Home Screen.

HyperScreen Ideas Across the Curriculum

Here is a list of ideas that lend themselves to *HyperScreen* stacks. They are organized according to subject areas: English, Science, Social Studies, and Math.

English

HyperScreen Book Reviews

Introduce titles by a particular author. Have students make a Home Screen with titles and buttons linked to other screens containing information about the books.

Present books of a particular genre, such as a stack of biographies or mysteries.

Have the class create a stack of book reviews focused on opinions of books.

HyperScreen Literature

HyperScreen is an easy way to have students work with point of view. Students might present a character's dilemma. Then students can create screens in which other characters in the book describe how the problem should be solved.

Have students design a stack to illustrate a sequence of events in a story.

Make a stack of students' favorite sections of a book.

Have students set up a stack as an interview of authors or literary characters.

Students can create their own interactive graphic adventure stories.

HyperScreen Writing Workshop

Have students create a short story or play with *HyperScreen.*

Students can create a cartoon story stack.

You can make a "notebook" stack collection of words, phrases, or sentences that show an interesting use of language.

Have students gather favorite beginnings of books and make a stack of these opening sentences or paragraphs.

Develop an anthology stack for your students of class poetry or poems by favorite authors.

***HyperScreen* Tutorials**
Create a vocabulary stack for your students of synonyms, antonyms, or analogies.

Make a grammar tutorial for your students using a game-show format. For example, have a stack that contains grammar errors. Create linking screens or pop-up text to show the rules of correct usage.

Develop a spelling, punctuation, or capitalization tutorial for your students.

Science

***HyperScreen* Life Cycles or Processes**
Make a stack to show your students the development of a frog, butterfly, or salmon.

Show your students the evolution of the horse in a series of screens.

Explain the process of photosynthesis to your students within a series of screens.

Show the organs of the human body on a screen linked to screens with close-ups of organs.

***HyperScreen* Diagrams**
Show the roles of major plant parts such as roots, stems, leaves, and flowers in a series of screens.

Create a stack illustrating the various layers on a cross section of the earth.

Create a stack describing the three basic rock types formed in the earth: sedimentary, metamorphic, and igneous.

Create a periodic table of elements.

Develop a timeline for scientific discoveries and list names of scientists and their discoveries.

***HyperScreen* Reporter**
Use a weather map to show how weather systems move across the earth's surface.

Develop a stack about an endangered animal.

Have students list air pollutants and how they affect the environment.

Create a stack about the harmful effects of storing hazardous and toxic substances in the soil.

Social Studies

***HyperScreen* Timelines**
Have students design a 10-year family timeline with incidents gleaned from family lore.

Have students select a period of their lives. They can make primary source Pop-up Text buttons of their personal reminiscences.

Have students create a timeline of a historical period that you are studying.

Have students choose a certain period of a family member's life and collect stories and remembrances from him or her.

Have students create a timeline of a historical figure with significant events in that person's life.

Have students create a five-year timeline of two famous people who lived concurrently. Divide each year into two Pop-up Text button areas, one for each person. Use a Multi-button to pair the year buttons together.

Have students design a timeline of one year, marking the time in months rather than years.

***HyperScreen* Mysteries**
Create an archaeological dig stack. Raise the question, What am I? Have a screen with clues about a particular artifact. You might note the variety of ways archaeologists put clues together to identify an object.

Develop a stack of famous historical figures. Present clues to compare two people who claim to be the same person. Students will find the impostor by carefully observing the clothes, mannerisms, and speech of each person.

***HyperScreen* History**
Develop a stack of important events of a specific time period, such as the Civil War, World War 1, the Depression, or the Sixties.

Have students illustrate and describe the branches of the U.S. government using one or more stacks.

Have students compare and contrast two forms of government, such as democracy and communism in one or more stacks.

Have students create a stack displaying the process of how a bill becomes a law.

Mathematics

HyperScreen Math Tutorials

Make a word-problem helper stack. Create a series of screens showing the steps necessary to solving a word problem.

Attach two equations to one math problem and have the user determine which one is correct.

Attach multiple choice answers to a series of math problems. Use a format similar to SAT and PSAT tests.

HyperScreen Tables and Graphs

Have students design a table comparing the literacy rates in various countries.

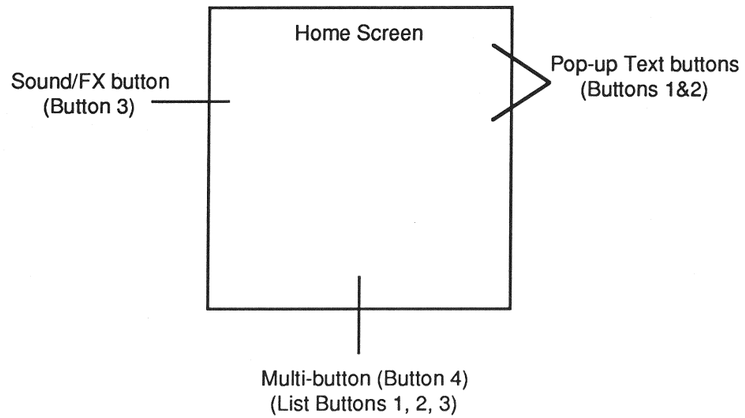
Have students create a stack illustrating the amount of rainfall during the year in a particular region.

HyperScreen Stack Design Charts

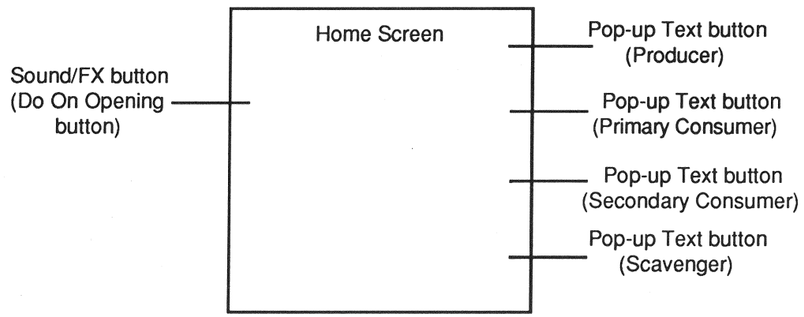
This section of the Teaching Guide will take you through the construction of several HyperScreen Stack Design Charts which can be used for a variety of stacks in different content areas. The charts listed here are just a sampling of the stack designs possible with *HyperScreen*. Accompanying each chart is an example of how it might be filled in using one of the Teaching Guide activities.

Single-screen Stack Design Chart

The single-screen stack is one of the simplest structures you can use—a single screen with Pop-up Text boxes. Single-screen stacks could contain Sound/FX buttons as well as Pop-up Text. You might use Multi-buttons to arrange the order of Pop-up Text and/or sound. This basic stack works well for beginning *HyperScreen* users or younger students.

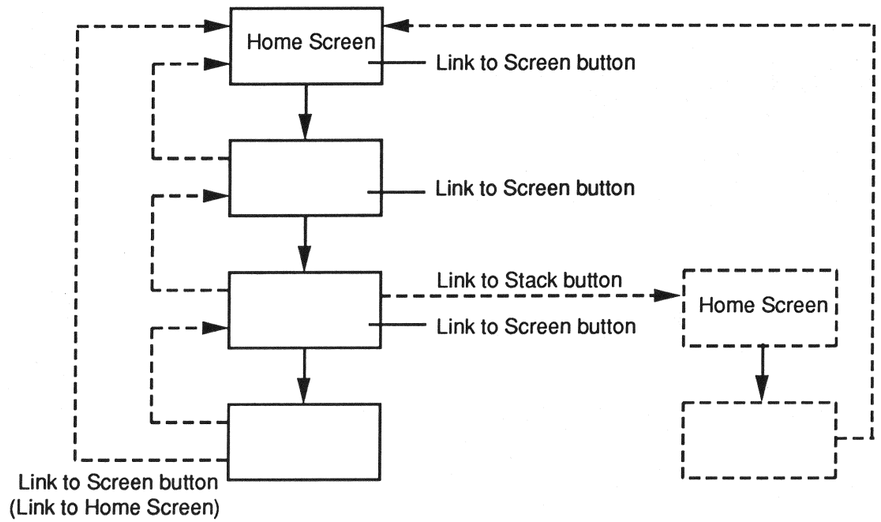


Use the Single-screen Stack Design for the **Creating a Food Web** activity as in the sample chart below:

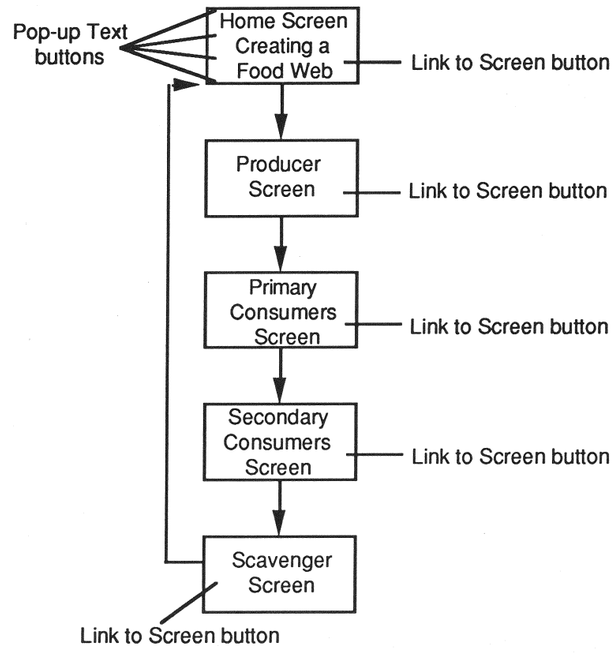


Chain of Screens Design Chart

The chain of screens is a simple stack design in which one screen is linked to another in a sequence using Link to Screen buttons. Individual screens could contain Pop-up Text, Sound/FX, and Multi-buttons. You might use this design for more complex stacks by having screens connect to the Home Screen, to each other, or even to another stack as shown with the dotted lines. A Link to Screen button that is last on a Multi-button list could link the screens.

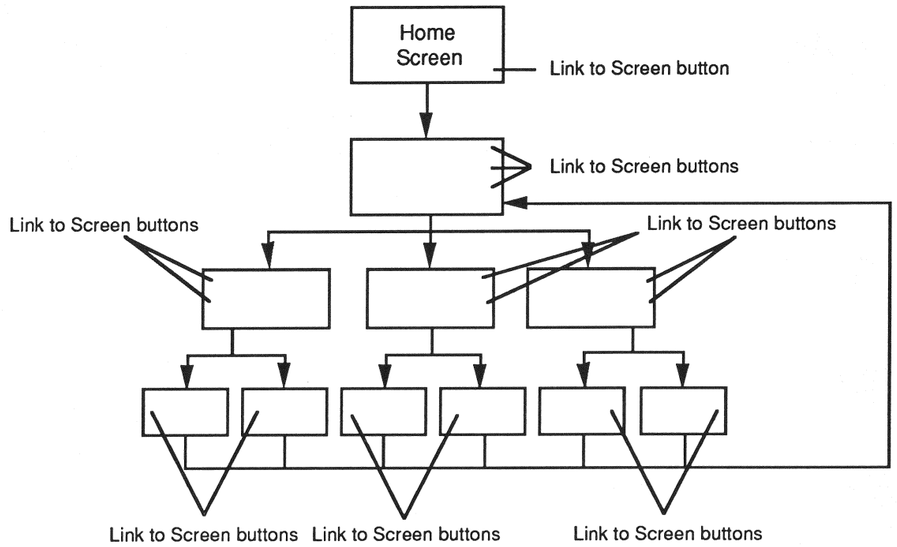


Use the chain of screens design for the **Food Web, Extended** activity as in the sample chart below:

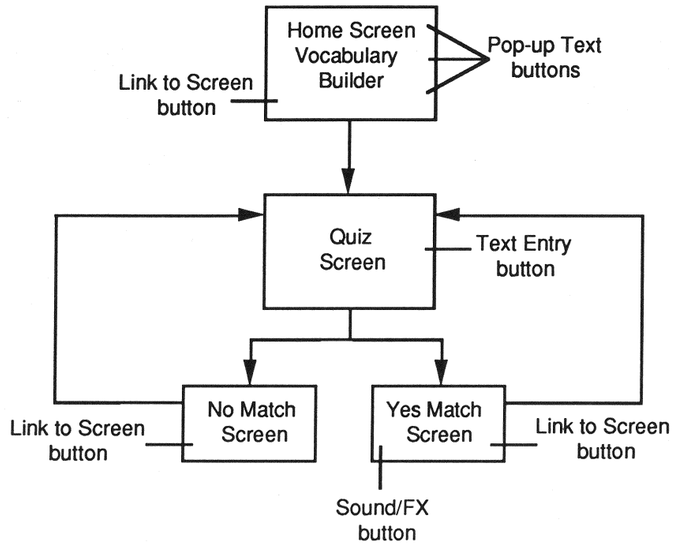


Branching Chain of Screens Design Chart

This stack design is similar to the chain of screens, but in this design screens branch using Text Entry buttons. You could also create branching by setting up two Link to Screen buttons on a single screen and having the user choose a button.

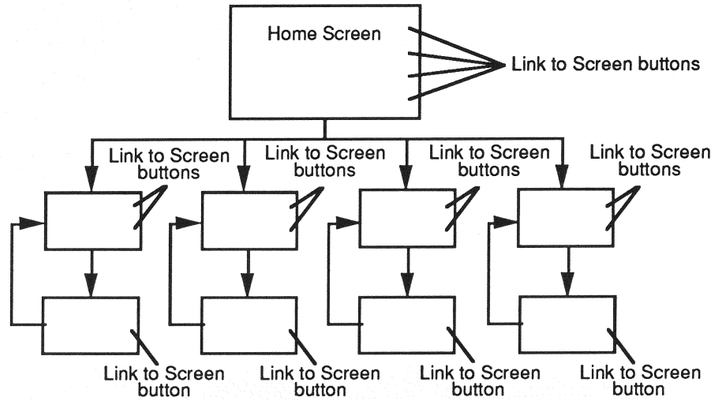


Use the branching chain of screen designs for the Vocabulary Quiz stack as in the sample chart below:

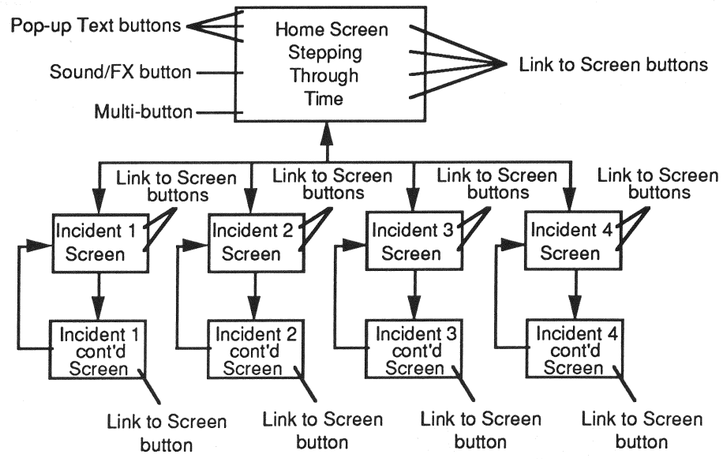


Hub Screen with Linked Screens Design Chart

This more complex stack design uses a central screen, the Home Screen, as a Hub Screen connected to several screens or chains of screens. Link to Screen buttons connect the screens to the hub. This requires several Link to Screen buttons on the hub screen.

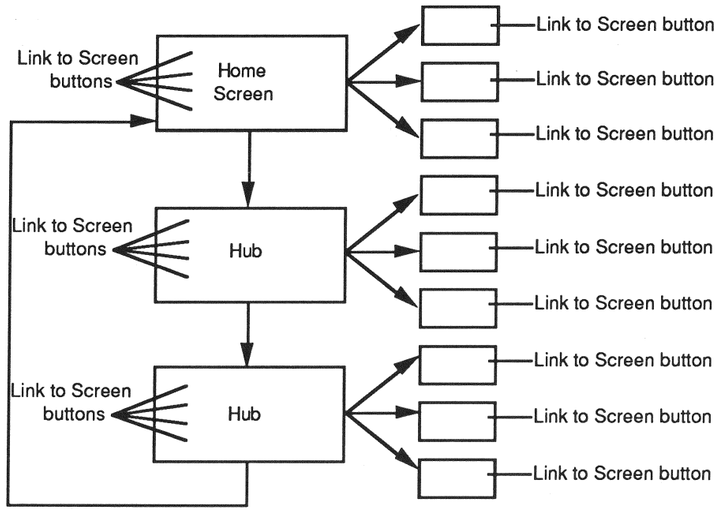


Use the Hub Screen with Linked Screens Stack Design for the **Stepping Through Time, Extended** activity as in the sample chart below:

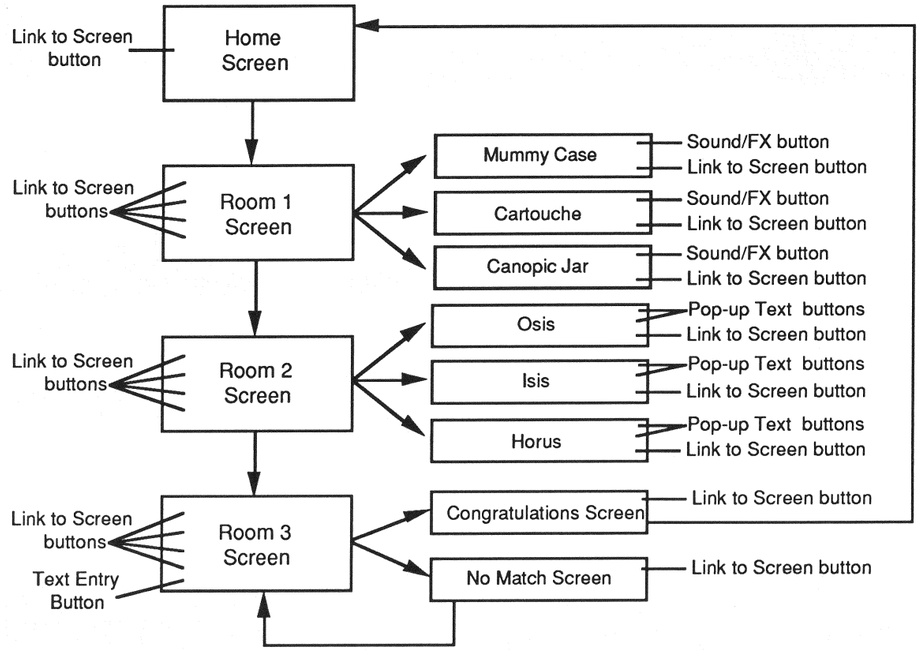


Linked Hub Screens Design Chart

This is a complex stack design using a series of Hub Screens connected to each other with Link to Screen buttons. Several screens radiate from each hub, connected with Link to Screen buttons.

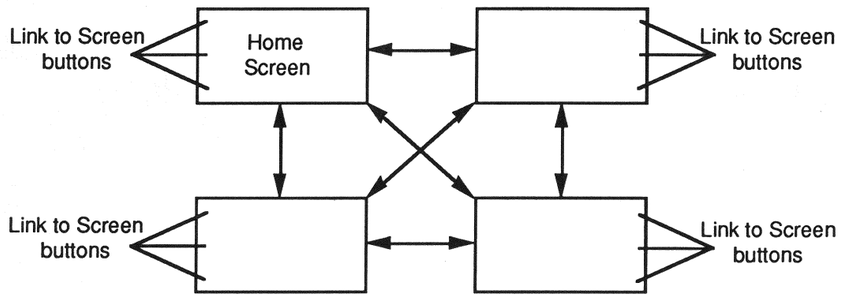


Use the Linked Hub Screen Design for the **On Exhibit** stack as in the sample chart below:

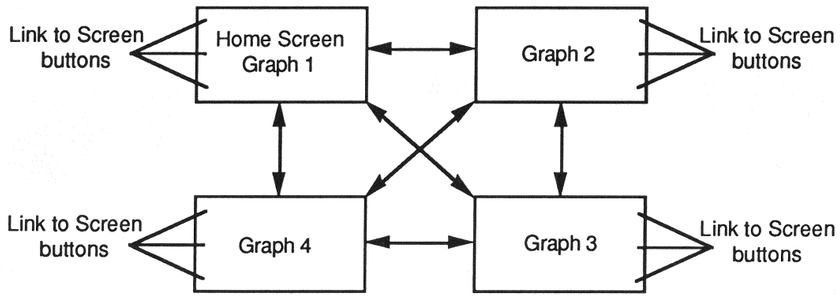


Linked Web of Screens Design Chart

In this stack design, each screen is connected to all of the other screens using Link to Screen buttons. The user could choose to link to any of the screens in the stack from any other screen. As in the other stack designs, you could use Pop-up Text, Sound, and Multi-buttons on your screens as well.



Use the Linked Web of Screens for the **Statistically Speaking** activity as in the sample chart below:



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